

## **CHAPTER 8**

---

## **INDEX**



## CHAPTER 8

## INDEX

**Air Quality**

Description: 3-3

Effects: 4-5

Scoping Comments and Other Issues Evaluated in the Assessment: 4-5

Methodology for Assessing Impacts to Air Quality: 4-6

Standard Operating Procedures: 4-8

Impacts by Alternative: 4-9

Mitigation: 4-13

Cumulative Effects: 4-202

Unavoidable Effects: 4-243

Short and Long Term Effects: 4-246

Irreversible Effects: 4-251

**Alternatives***Chapter 2 of the EIS is devoted to describing the alternatives**Chapter 4 is devoted to analyzing the effects of the No Action Alternative and alternatives B, C, D, and E*

Development of Alternatives: 1-13

Description of the Alternatives: 2-14

Alternative A: 2-14

Alternative B: 2-17

Alternative C: 2-19

Alternative D: 2-19

Alternative E: 2-20

Alternatives Considered but Not Further Analyzed: 2-22

Summary of Impacts by Alternatives: 2-40

*See also Air Quality; Soil Resources; Water Resources and Quality; Wetland and Riparian Areas; Fish and Other Aquatic Organisms; Wildlife Resources; Livestock; Wild Horses and Burros; Paleontological and Cultural Resources; Visual Resources; Wilderness and Special Areas; Recreation; Social and Economic Values; and Human Health and Safety***American Indian and Alaska Native Cultural Resources**

Alaska National Interest Conservation Lands (ANILCA) Section 810 Analysis of Subsistence Impacts: Appendix G

*See Paleontological and Cultural Resources***Anadromous Fish***See Fish and Other Aquatic Organisms***Biological Crust***See Soil Resources***Climate**

Description: 3-2

**Consultation and Coordination***Chapter 5 of the EIS is devoted to consultation and coordination*

Description: 1-9

Coordination and Education: 2-39

**Cumulative Effects**

Structure of the Cumulative Analysis: 4-197

Resource Protection Measures Considered in the

Cumulative Impacts Analysis: 4-201

Other Information Considered: 4-202

Cumulative Effects by Resources: 4-202

Unavoidable Adverse Effects: 4-243

Short and Long Term Effects: 4-246

Irreversible Effects: 4-251

**Decisions to be Made**

Decisions to be Made by Decisionmaker: 1-5

**Demographic***See Social and Economic Values***Economic Environment***See Social and Economic Values***Effects**

Comparison of Alternatives: 2-40

How the Effects of the Alternatives Were Estimated: 4-1

*Chapter 4 is devoted to analyzing the effects of the No Action Alternative and alternatives B, C, D, and E***Environment***Chapter 3 of the EIS is devoted to a description of the environment*

## **Environment (cont.)**

*Chapter 4 of the EIS is devoted to analysis of effects on the environment*

## **European Settlement Resources**

*See Paleontological and Cultural Resources*

## **Expenditures by the BLM**

*See Social and Economic Values*

## **Fish and Other Aquatic Organisms**

Description: 3-31

Special Status Species: 3-36

Effects: 4-76

Scoping Comments and Other Issues Evaluated in the Assessment: 4-77

Standard Operating Procedures: 4-77

Impacts by Treatment: 4-80

Impacts by Alternative: 4-89

Special Status Fish and Other Aquatic Organisms: 4-92

Cumulative Effects: 4-213

Unavoidable Effects: 4-244

Short and Long Term Effects: 4-248

Irreversible Effects: 4-252

## **Fire**

Vegetation Condition and Fire Regimes: 3-28

*See Wildland Fire*

## **Forest and Woodland Management**

Description: 2-3

## **Herbicides**

Herbicide Active Ingredients Evaluated under the Proposed Alternatives: 2-9

Herbicide Modes of Action and Treatment Methods: 2-13

Herbicide Treatment Standard Operating Procedures: 2-22

## **Human Health and Safety**

Description: 3-71

Effects: 4-174

Scoping Comments and Other Issues Evaluated in the Assessment: 4-175

Standard Operating Procedures: 4-175

Assessment of Human Health Risks for Each

Herbicide: 4-175

Impacts by Alternative: 4-195

Mitigation: 4-196

Cumulative Effects: 4-238

## **Human Health and Safety (cont.)**

Effects (cont.)

Unavoidable Effects: 4-246

Short and Long Term Effects: 4-251

Irreversible Effects: 4-253

## **Impacts**

*See Alternatives and Cumulative Effects*

## **Important Plant Uses and Species Used by American Indians and Alaska Natives**

*See Paleontological and Cultural Resources*

## **Issues and Concerns**

Issues and Concerns: 1-12

Issues Not Addressed: 1-13

## **Land Uses and Ecoregions**

Description: 3-1

Effects: 4-5

## **Livestock**

Description: 3-44

Effects: 4-124

Scoping Comments and Other Issues Evaluated in the Assessment: 4-124

Standard Operating Procedures: 4-124

Summary of Herbicide Impacts: 4-125

Impacts by Alternative: 4-133

Mitigation: 4-136

Cumulative Effects: 4-222

Unavoidable Effects: 4-244

Short and Long Term Effects: 4-249

Irreversible Effects: 4-252

## **Mitigation**

Description: 2-40

*See also Air Quality; Soil Resources; Water Resources and Quality; Wetland and Riparian Areas; Fish and Other Aquatic Organisms; Wildlife Resources; Livestock; Wild Horses and Burros; Paleontological and Cultural Resources; Visual Resources; Wilderness and Special Areas; Recreation; Social and Economic Values; and Human Health and Safety*

## **Native Peoples**

*See Social and Economic Values; Paleontological and Cultural Resources; Cumulative Effects; Scoping*

## **Non-timber Forest Products**

Description: 3-30

**Noxious Weeds and Other Invasive Species**

Description: 3-26

**Paleontological and Cultural Resources**

Special Precautions: 2-29

Description: 3-45

Effects: 4-146

Scoping Comments and Other Issues Evaluated in the Assessment: 4-147

Standard Operating Procedures for Addressing BLM Actions on Paleontological, Cultural, and Subsistence Resources: 4-147

Herbicide Impacts on Paleontological and Cultural Resources: 4-148

Herbicide Impacts on Native American Health: 4-149

Impacts by Alternative: 4-150

Mitigation: 4-152

Cumulative Effects: 4-226

Unavoidable Effects: 4-245

Short and Long Term Effects: 4-249

Irreversible Effects: 4-252

**Public Involvement**

Public Scoping Meetings: 1-12

Public Involvement: 5-1

**Purpose and Need for the Proposed Action**

Proposed Action: 1-3

Purpose and Need: 1-4

**Rangeland Management**

Description: 2-3

**Recreation**

Description: 3-60

Effects: 4-159

Scoping Comments and Other Issues Evaluated in the Assessment: 4-160

Standard Operating Procedures: 4-160

Impacts by Treatment: 4-160

Impacts by Alternative: 4-161

Mitigation: 4-163

Cumulative Effects: 4-233

Unavoidable Effects: 4-246

Short and Long Term Effects: 4-250

Irreversible Effects: 4-253

**Revenues Generated by BLM Lands**

*See Social and Economic Values*

**Riparian Management**

Description: 2-4, 3-18

**Rights-of-way**

Description: 3-62

**Risk from Cancer, Disease, Injuries, or Using Herbicides and Wildfire Control on Public Lands**

*See Human Health and Safety*

**Scoping**

Scope of Analysis: 1-5

Public Involvement, Scoping, and Issues: 1-12, 5-1

**Smoke Management Policies and Regulations**

*See Air Quality*

**Social and Economic Values**

Description: 3-63

Effects: 4-163

Scoping Comments and Other Issues Evaluated in the Assessment: 4-164

Standard Operating Procedures: 4-164

Impacts by Alternative: 4-166

Mitigation: 4-174

Cumulative Effects: 4-234

Unavoidable Effects: 4-246

Short and Long Term Effects: 4-250

Irreversible Effects: 4-253

**Soil Compaction**

*See Soil Resources*

**Soil Erosion**

*See Soil Resources*

**Soil Resources**

Description: 3-7

Effects: 4-13

Scoping Comments and Other Issues Evaluated in the Assessment: 4-13

Factors that Influence the Fate, Transport, and Persistence of Herbicides in Soil: 4-14

Impacts by Treatment: 4-15

Impacts by Alternative: 4-21

Mitigation: 4-24

Cumulative Effects: 4-205

Unavoidable Effects: 4-243

Short and Long Term Effects: 4-247

Irreversible Effects: 4-251

**Special Precautions: 2-28**

### **Special Status Species**

Special Precautions: 2-28

*See Fish and Other Aquatic Resources*

*See Vegetation*

*See Wildlife Resources*

### **Species**

Common and Scientific Names of Species:

Appendix A

Special Status Species List: Appendix J

### **Statutes, Regulations, and Policies**

Laws, Policies, and Regulations that Influence

Vegetation Treatments: 1-6

### **Stipulations and Required Operating Procedures**

Herbicide Treatment Standard Operating Procedures:  
2-22

Monitoring: 2-35

*See also Air Quality; Soil Resources; Water Resources  
and Quality; Wetland and Riparian Areas; Fish and  
Other Aquatic Organisms; Wildlife Resources;  
Livestock; Wild Horses and Burros; Paleontological  
and Cultural Resources; Visual Resources; Wilderness  
and Special Areas; Recreation; Social and Economic  
Values; and Human Health and Safety*

### **Threatened and Endangered Species**

Consultation: Chapter 5

List of Special Status Species: Appendix J

### **Topography, Geology, Minerals, Oil, and Gas**

Description: 3-6

### **Vegetation**

Planning and Management: 2-5

Treatment Acreages: 2-31

Monitoring: 2-35

Description: 3-19

Special Status Species: 3-31

Effects: 4-44

Scoping Comments and Other Issues Evaluated in  
the Assessment: 4-44

Standard Operating Procedures: 4-44

Impacts by Treatments: 4-47

Impacts by Alternative: 4-64

Mitigation: 4-71

Special Status Plant Species: 4-71

Cumulative Effects: 4-211

Unavoidable Effects: 4-244

Short and Long Term Effects: 4-248

Irreversible Effects: 4-252

### **Vegetation Condition and Fire Regimes**

Description: 3-28

### **Visual Resources**

Description: 3-58

Effects: 4-152

Scoping Comments and Other Issues Evaluated in  
the Assessment: 4-153

Standard Operating Procedures: 4-153

Impacts by Treatment: 4-154

Impacts by Alternative: 4-154

Mitigation: 4-154

Cumulative Effects: 4-229

Unavoidable Effects: 4-245

Short and Long Term Effects: 4-250

Irreversible Effects: 4-253

### **Water Resources and Quality**

Water Resources Description: 3-11

Water Quality Description: 3-15

Effects: 4-24

Scoping Comments and Other Issues Evaluated in  
the Assessment: 4-22

Standard Operating Procedures: 4-24

Impacts by Treatment: 4-24

Impacts by Alternative: 4-34

Mitigation: 4-36

Cumulative Effects: 4-206

Unavoidable Effects: 4-243

Short and Long Term Effects: 4-247

Irreversible Effects: 4-251

### **Wetlands and Riparian Areas**

Description: 3-18

Effects: 4-36

Scoping Comments and Other Issues Evaluated in  
the Assessment: 4-37

Factors that Influence the Fate, Transport, and  
Persistence of Herbicides in Wetlands and Riparian  
Areas: 4-37

Summary of Herbicide Impacts: 4-37

Impacts by Alternative: 4-41

Mitigation: 4-44

Cumulative Effects: 4-209

Unavoidable Effects: 4-243

Short and Long Term Effects: 4-247

Irreversible Effects: 4-251

**Wild Horses and Burros**

Description: 3-45

Effects: 4-136

Scoping Comments and Other Issues Evaluated in the Assessment: 4-137

Standard Operating Procedures: 4-137

Summary of Herbicide Impacts: 4-137

Impacts by Alternative: 4-143

Mitigation: 4-146

Cumulative Effects: 4-223

Unavoidable Effects: 4-244

Short and Long Term Effects: 4-249

Irreversible Effects: 4-252

**Wilderness and Special Areas**

Special Precautions: 2-29

Description: 3-58

Effects: 4-155

Scoping Comments and Other Issues Addressed in the Assessment: 4-156

Standard Operating Procedures: 4-156

Impacts by Treatment: 4-156

Impacts by Alternative: 4-157

Mitigation: 4-159

Cumulative Effects: 4-230

Unavoidable Effects: 4-245

Short and Long Term Effects: 4-250

Irreversible Effects: 4-253

*See also Recreation Resources*

*See also Visual Resources*

**Wildland Fire**

Wildland Fire Management: 2-2

**Wildlife and Fisheries Management**

Description: 2-4

**Wildlife Resources**

Description: 3-36

Special Status Species: 3-44

Effects: 4-96

Scoping Comments and Other Issues Evaluated in the Assessment: 4-98

Standard Operating Procedures: 4-98

Summary of Herbicide Impacts: 4-101

Impacts of Herbicide Treatments on Wildlife and Habitat by Ecoregion: 4-109

Impacts by Alternative: 4-114

Mitigation: 4-118

Special Status Wildlife Species: 4-118

Cumulative Effects: 4-216

Unavoidable Effects: 4-244

Short and Long Term Effects: 4-248

Irreversible Effects: 4-252